

## **AMENDMENTS IN THE CLAIMS:**

1. (Original) A method of growing a p-type nitride semiconductor material by molecular beam epitaxy, the method comprising supplying bis(cyclopentadienyl)magnesium ( $\text{Cp}_2\text{Mg}$ ) during the growth process.
2. (Currently Amended) A method as claimed in claim 1, wherein the nitride semiconductor material is p-type (Ga,Al)N.
3. (Currently Amended) A method as claimed in claim 1, ~~and~~ comprising supplying ammonia gas during the growth process.
4. (Currently Amended) A method as claimed in claim 1, ~~and~~ comprising supplying ammonia gas, gallium and  $\text{Cp}_2\text{Mg}$  to a growth chamber, thereby to grow a layer of p-type GaN.
5. (Currently Amended) A method as claimed in claim 1, ~~and~~ comprising supplying ammonia gas, aluminium, gallium and  $\text{Cp}_2\text{Mg}$  to a growth chamber, thereby to grow a layer of p-type AlGaN.
6. (Currently Amended) A method as claimed in 1, ~~and~~ comprising changing the supply rate of  $\text{Cp}_2\text{Mg}$  during the growth of the nitride semiconductor material.
7. (Cancelled)
8. (Currently Amended) A method as claimed in claim 1, wherein the growth process is carried out at a temperature of at least 800 °C.
9. (Currently Amended) A method as claimed in claim 1, wherein the growth process is carried out at a temperature of at least 850 °C.

10. (Currently Amended) A method as claimed in claim 1, wherein the growth process is carried out at a temperature of at least 920 °C.
11. (Currently Amended) A method as claimed in claim 1, wherein the growth process is carried out at a temperature of at least 950 °C.
12. (Currently Amended) A method as claimed in claim 1, wherein the growth process is carried out at a temperature of 960 °C or below.
13. (Currently Amended) A method as claimed in claim 1, ~~and~~ comprising supplying  $\text{Cp}_2\text{Mg}$  at a beam equivalent pressure of at least  $1 \times 10^{-9}$  mbar.
14. (Currently Amended) A method as claimed in claim 1, ~~and~~ comprising supplying  $\text{Cp}_2\text{Mg}$  at a beam equivalent pressure of at least  $3 \times 10^{-9}$  mbar.
15. (Currently Amended) A method as claimed in claim 1, ~~and~~ comprising supplying  $\text{Cp}_2\text{Mg}$  at a beam equivalent pressure of  $1 \times 10^{-7}$  mbar or below.
16. (Currently Amended) A method as claimed in claim 1, ~~and~~ comprising supplying  $\text{Cp}_2\text{Mg}$  at a beam equivalent pressure of  $1.5 \times 10^{-8}$  mbar or below.
17. (Currently Amended) A method as claimed in claim 4, ~~and~~ comprising supplying elemental gallium at a beam equivalent pressure of at least  $1 \times 10^{-8}$  mbar.
18. (Currently Amended) A method as claimed in claim 4, ~~and~~ comprising supplying elemental gallium at a beam equivalent pressure of  $1 \times 10^{-5}$  mbar or below.

19. (Currently Amended) A method as claimed in claim 5, ~~and~~ comprising supplying elemental gallium and elemental aluminium at an overall beam equivalent pressure of at least  $1 \times 10^{-8}$  mbar.
20. (Currently Amended) A method as claimed in claim 5, ~~and~~ comprising supplying elemental gallium and elemental aluminium at an overall beam equivalent pressure of  $1 \times 10^{-5}$  mbar or below.
21. (Previously Presented) A p-type nitride semiconductor material grown by a method defined in claim 1.
22. (Previously Presented) A semiconductor device comprising a layer of a p-type nitride semiconductor material grown by a method defined in claim 1.
23. (Currently Amended) A semiconductor device as claimed in claim 22, wherein the layer of nitride semiconductor material is a layer of p-type (Ga,Al)N.